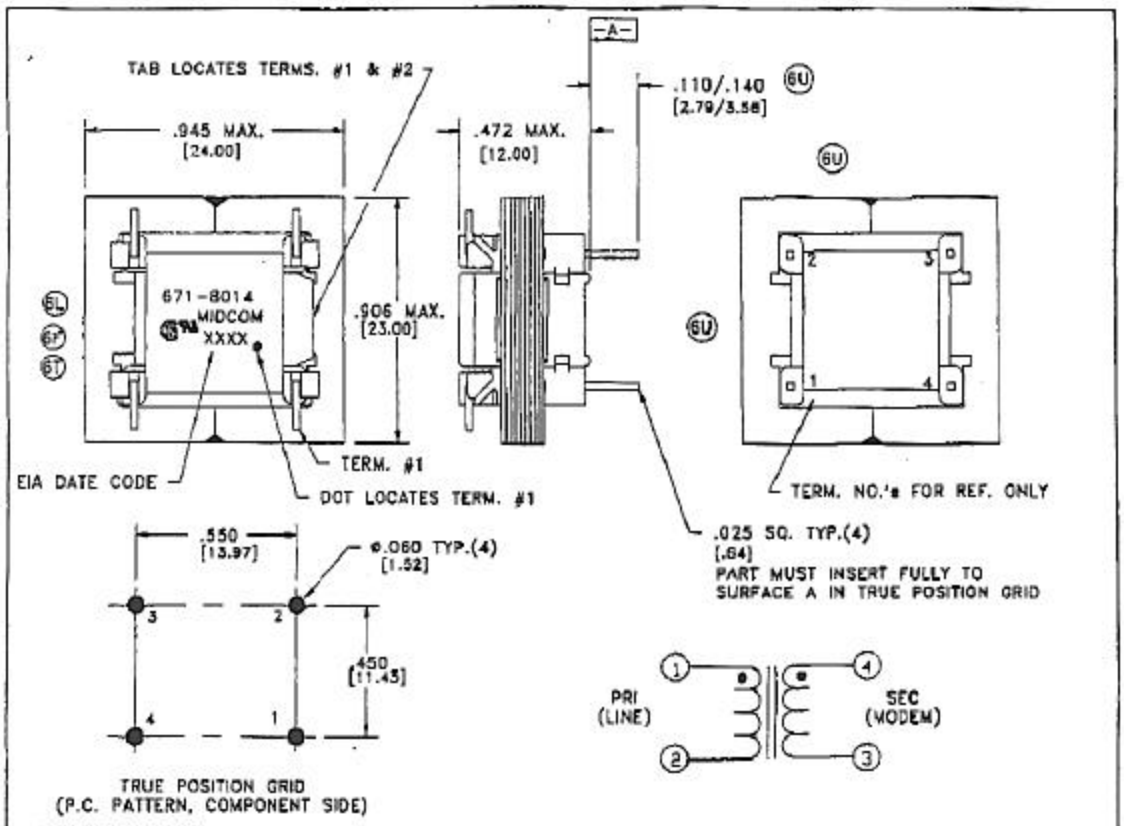
Jameco Part number 117760
P/N 117760



SPECIFICATIONS:

IMPEDANCE: 600 ohms each, PRI & SEC (ref). Designed to reflect 600 ohms on PRI with 470 ohm load on SEC.

LONGITUDINAL BALANCE: 66dB min., 60 – 1000Hz; 46dB min., terms. (1-2). 1000 – 4000Hz per FCC Part 68.310, either 3 or 4 grounded.

D.C. RESISTANCE, 20°C: PRI, 108 ohms ±10%
SEC, 120 ohms ±10%.

FREQUENCY RESPONSE: ±1.0dB, 600 – 3500Hz; ±4.0dB, 300 – 600Hz.

INSERTION LOSS: 2.5dB max. at 1000Hz per IEEE method, 20°C, 0 – 30mADC.

DIELECTRIC RATING: 1000VAC, 1 minute tested by applying 1250VAC for 1 second between PRI and SEC and between PRI and core. Meets or exceeds requirements of: CAN/CSA-C22.2 (1988) No.225 (M90); DOC's CS-03 (Issue 7); UL's UL1459, 2nd Ed. (1992); and FCC's Part 68 (58 FR 44907, Aug. 25, 1993).

TURNS RATIO: 1:1 ±2%.

OPERATING CONDITIONS: All specs. except as noted to be met from −20 to +4dBm, 0 – 100mADC in PRI, 600 ohm source resistance on PRI, 470 ohm load on SEC.

NOTE: Laminations are to have 100% varnish coverage.

AGENCY	NUMBER
UL	E99406
CSA	LR61218

Midcom, Inc.
Watertown, SD USA

Unless otherwise specified:
Tolerances: Fractions: ±1/64
Angles: ±1° Decimals: ±.005(.127mm)

DRAWING TITLE
TRANSFORMER

DRAWING NO.
671-8014

REV.
6X

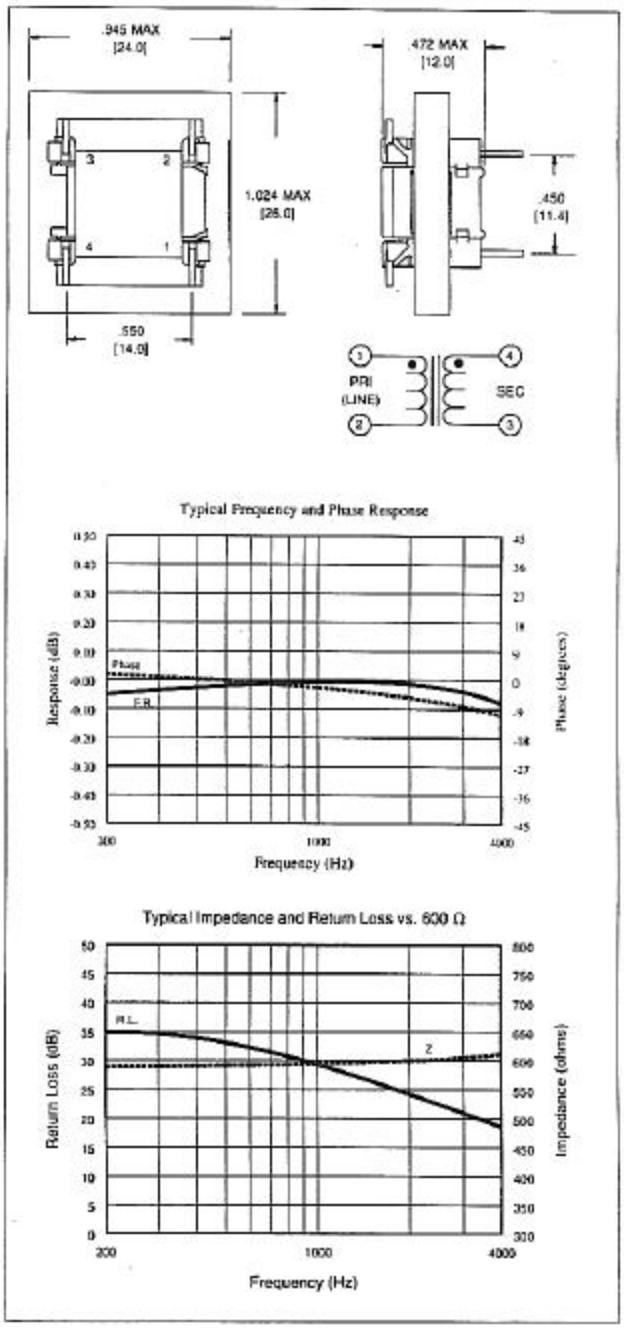
671-8014

Jameco Part number 117760

Modem Coupling Transformers: 671-8025 and 671-8039

Features

- **Low distortion, specifically designed for use from V.32bis through V.34**
- **Flat frequency/phase response**
- **UL file number E99406**
  671-8039: Tested to UL standards via CSA NRTL/C (File No. LR61218)
- **CSA file number LR61218**



SPECIFICATIONS	671=8025	671=8039	UNITS
Suitable for but not limited to modem speeds up to:	V.32bis	V.34	---
Reflects 600 ohms at PRI with RL=	374	301	ohm
D.C. Resistance, 20°C, ± 10%, PRI	108	150	ohm
D.C. Resistance, 20°C, ± 10%, SEC	120	150	ohm
Frequency Response 200 Hz to 4 kHz	±0.25	±0.25	dB
Insertion Loss at 1 kHz, 20°C	2.0 ± 0.25	3.0 ± 0.50	dB
Return Loss vs. 600 ohms at 1 kHz	30 typ	30 typ	dB
Dielectric Test PRI - SEC, PRI - core	1250	1250	VAC
Direct Current in PRI	none	none	mA
Turns Ratio (PRI:SEC), 1 kHz, ± 2%	1:1	1:1	---
Longitudinal Balance 60 to 1000 Hz	60 min	60 min	dB
Longitudinal Balance 1 kHz to 4 kHz	40 min	40 min	dB
Total Harmonic Distortion 600 Hz, -10dBm	-76 max	-86 max	dB

Typical Distortion Figures (T.H.D.)

	671=8025			671=8039		
	-10 dBm	0 dBm	+10 dBm	-10 dBm	0 dBm	+10 dBm
300 Hz	-83 dB	-79 dB	-70 dB	-90 dB	-89 dB	-87 dB
600 Hz	-86 dB	-84 dB	-77 dB	-91 dB	-94 dB	-94 dB

Jameco Part number 117760

Midcom

Modem Coupling Transformer: 671-8255

Features

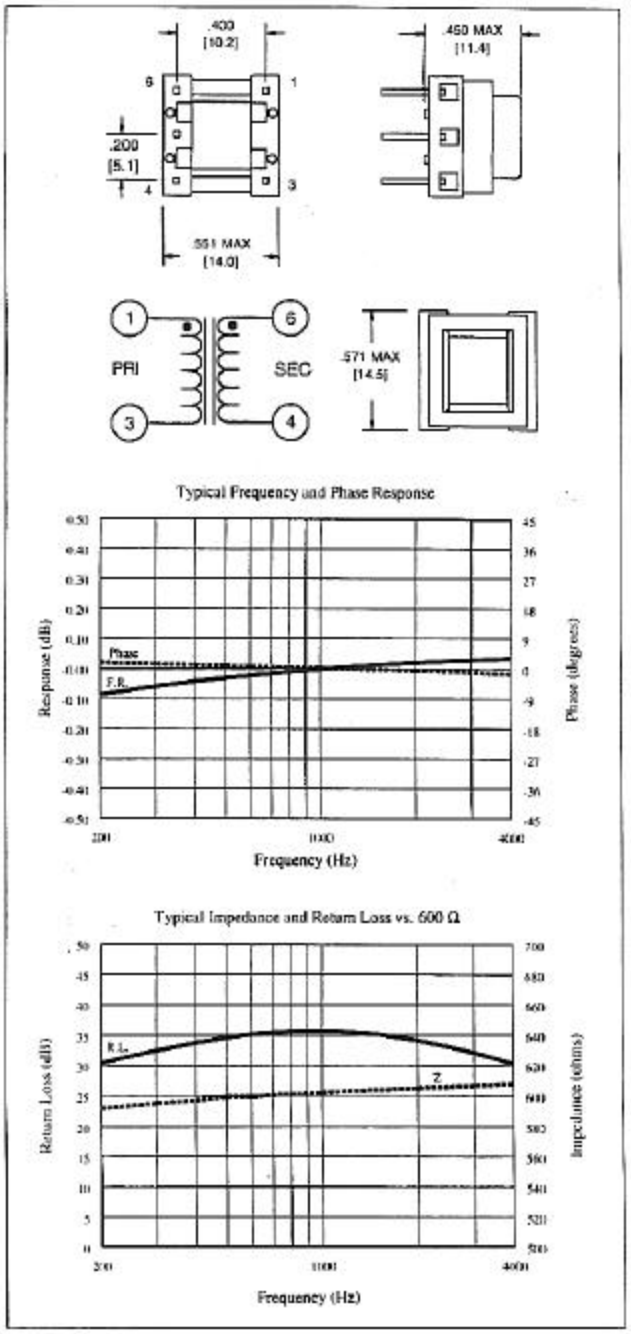
- **Low distortion and small size, specifically designed for use in V.32 pocket modem applications**
- **Flat frequency / phase response**
- **UL file number E99406**
- **CSA file number LR61218**

Specifications

Impedance: Designed to reflect 600 ohms on PRI with 600 ohms on SEC.
Turns Ratio: 0.920:1 ± 2%.
D.C. Current: None.
D.C. Resistance, 20°C: PRI: 46.5 ohms ± 10%
SEC: 67.6 ohms ± 10%
Inductance: 9H typ., 200Hz, 1.0V, Lp
Dielectric Test: 1250VAC, PRI - SEC
Frequency Response: ± 0.25dB, 300 Hz to 3500 Hz
Return Loss: 21 dB minimum at 300 Hz
Longitudinal Balance:
60 dB min., 200 Hz to 1000 Hz
40 dB min., 1000 Hz to 4000 Hz
Insertion Loss: 1.25 dB maximum, 1 kHz, 20°C
Total Harmonic Distortion (T.H.D.) at 600 Hz and -10 dBm:
-71dB (.028%) maximum

Typical Distortion Figures (T.H.D.)

Freq	-10 dBm	0 dBm	+4.7 dBm
300 Hz	-77 dB	-70 dB	-62 dB
600Hz	-85 dB	-78 dB	-74 dB



Midcom PO Box 1330 · 121 Airport Drive · Watertown SD 57201 · Phone 800-643-2661 · Fax 605-886-4486